

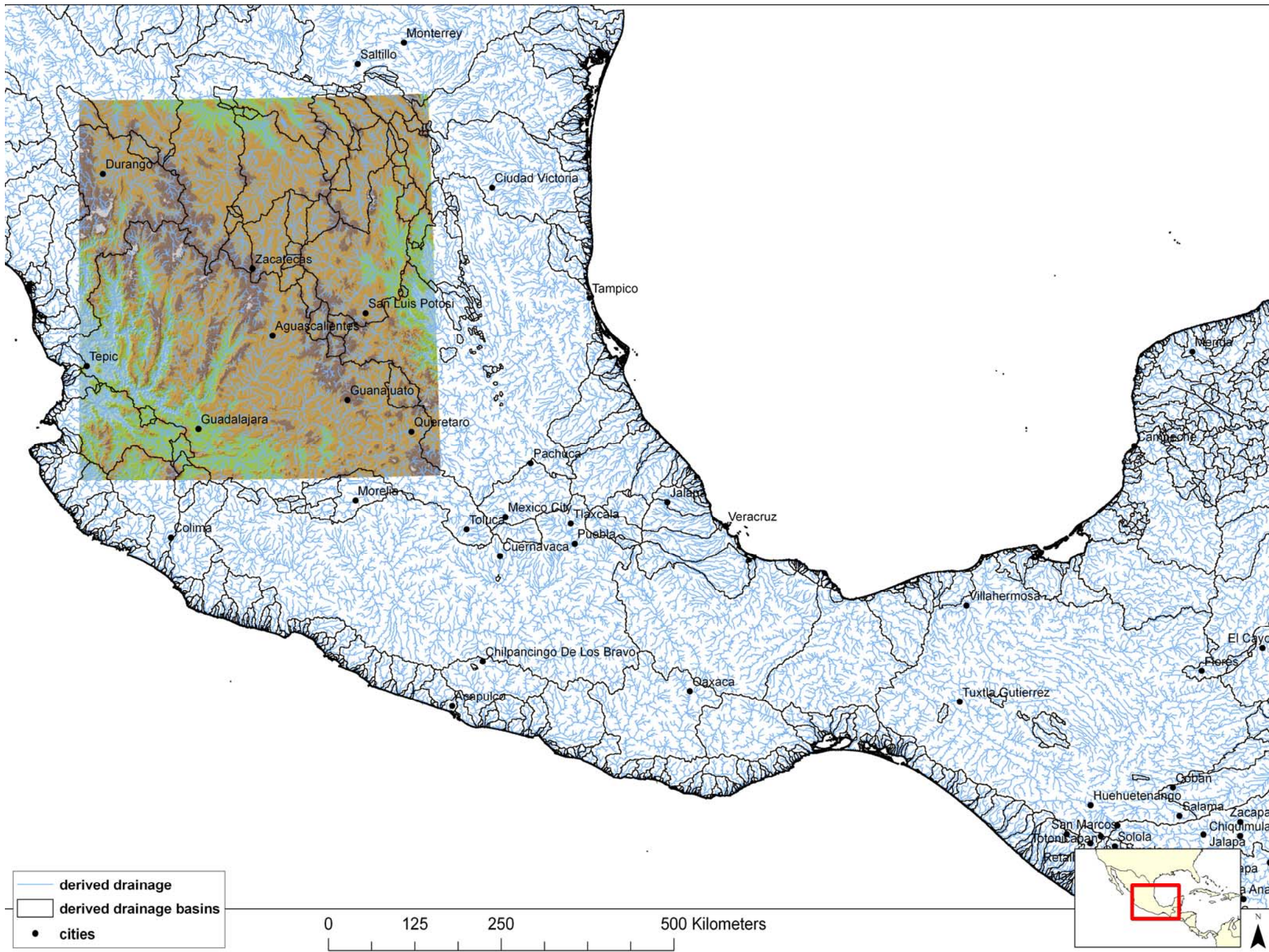
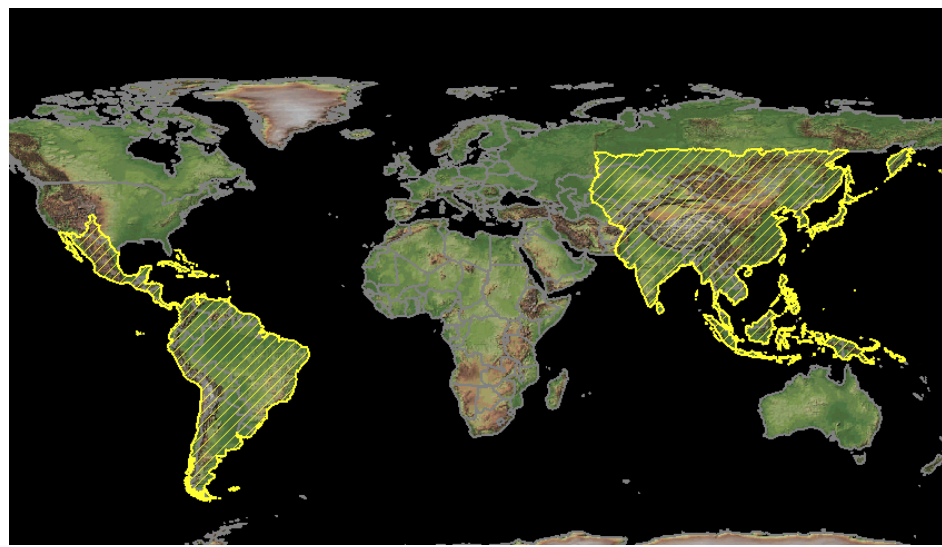
USGS HydroSHEDS—Elevation and Derived Hydrologic Data for the World

Barbara Parmenter, UEP/UIT (May 2007)

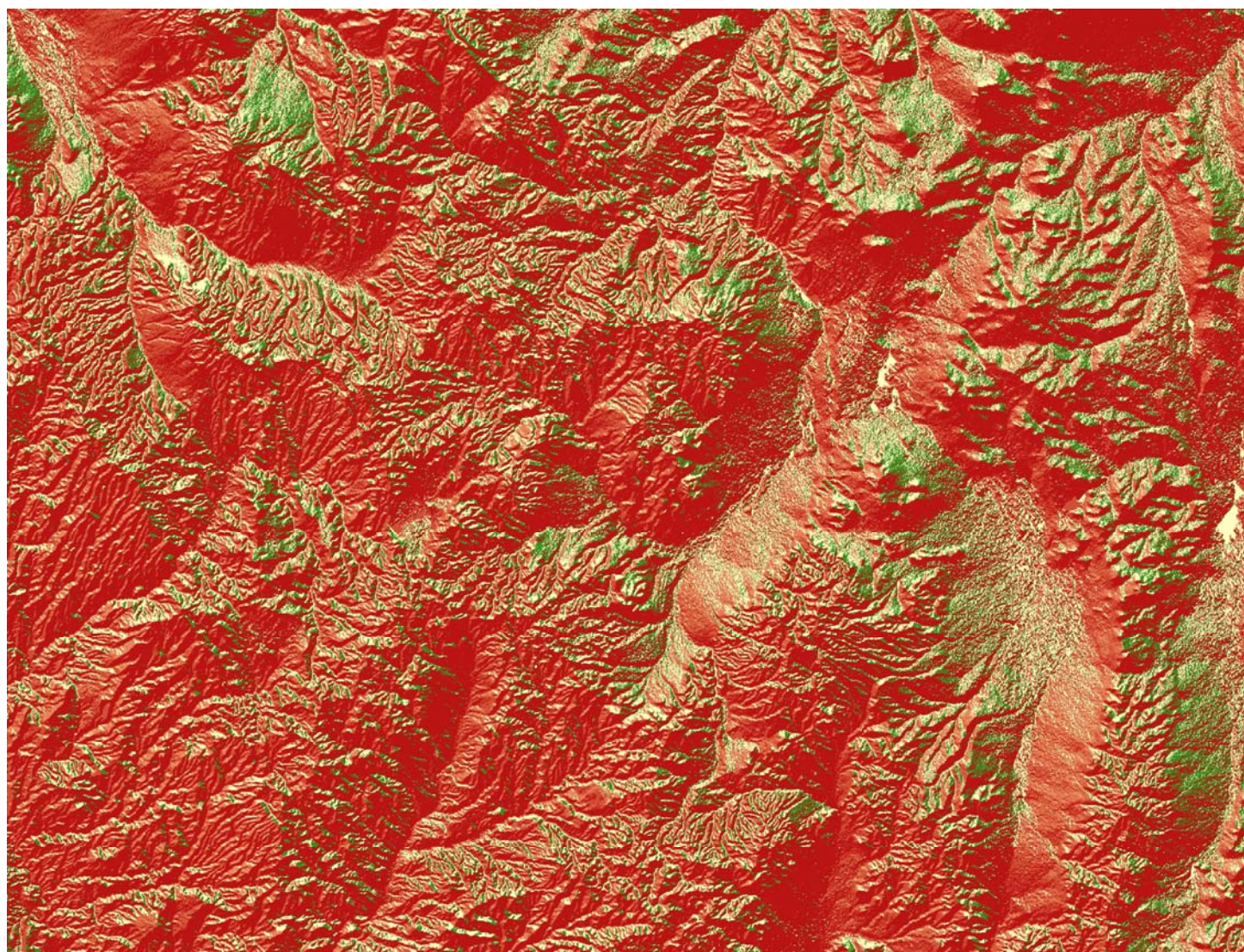
USGS HydroSHEDS Overview

The US Geological Survey is processing digital elevation data from NASA’s Shuttle Radar Topography Mission (SRTM) in February 2000, in order to provide derived hydrologic products. The data will cover most of the world (below 80 degrees latitude North and South). Products include a void-filled digital elevation model (DEM), hydrologically conditioned DEMs (on which hydrologic analysis can be performed), flow direction grids, flow accumulation grids, drainage networks, and watershed boundaries.

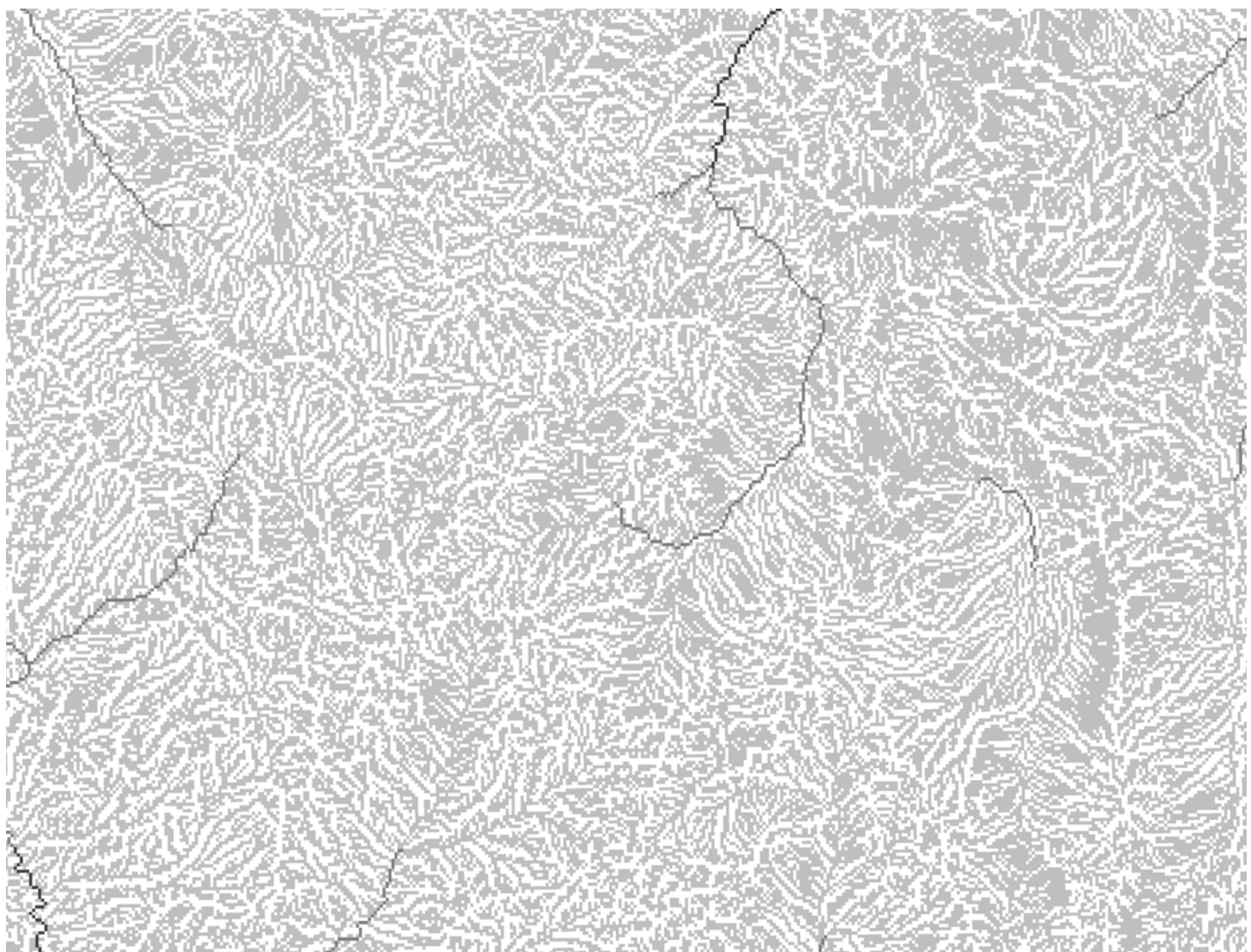
Current coverage (May, 2007) includes all of South America, Central America, and East Asia below 80 degrees North latitude.



A tile of a DEM for central Mexico, shown with the SRTM derived drainage system and watershed boundaries

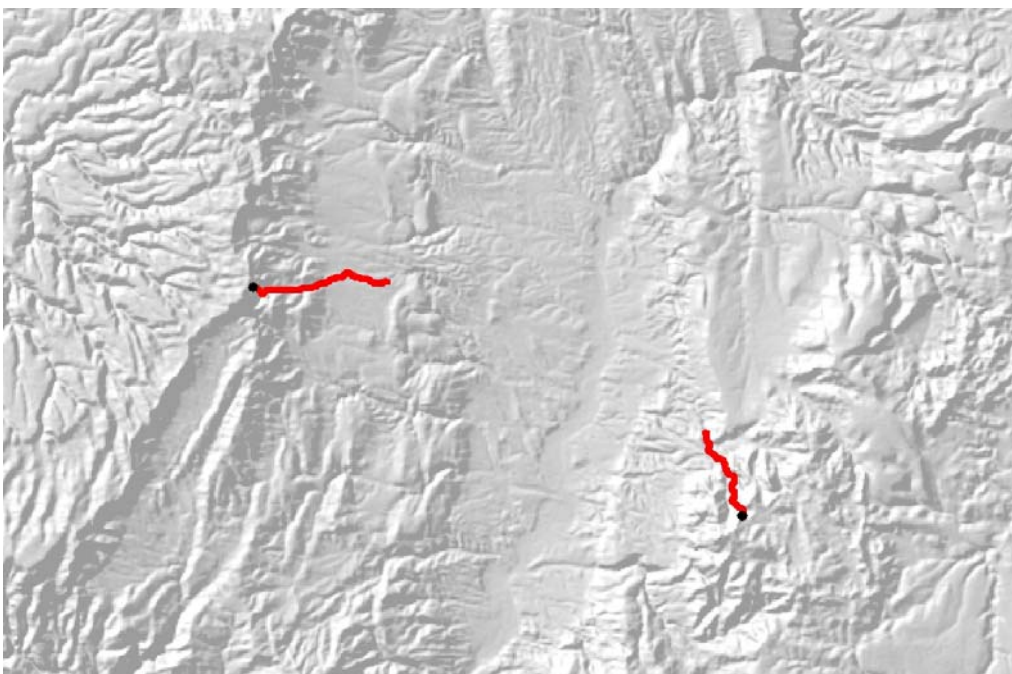


Flow Direction Grid



Flow Accumulation Grid

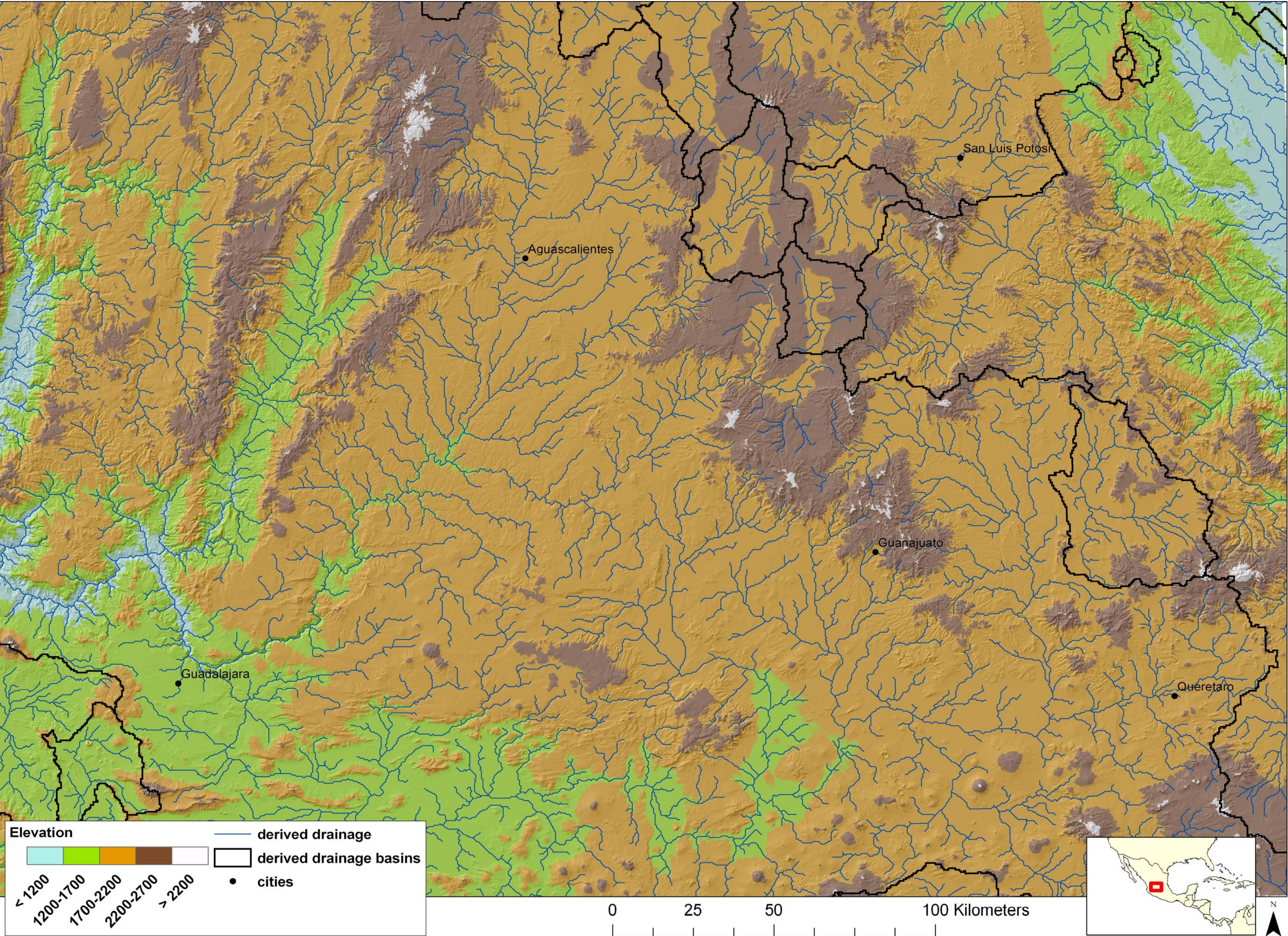
Below: Raindrop analysis—tracing flow path



HydroSHEDS data can be used for a variety of purposes, including water resource management and development, water quality analysis, and water balance and availability estimation

Africa is scheduled for completion in July 2007. Europe and North America is scheduled for completion in December 2007

The void-filled DEM for Central Mexico, with shaded relief also derived from the HydroSHEDS data



Derived Slope Map from HydroSHEDS Elevation Grid

